Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte UDO MICHAELIS, DIETER LINSE and JORGEN KNUDSEN

Appeal No. 2000-1142
Application No. 08/753,230

HEARD: FEBRUARY 20, 2002

Before LIEBERMAN, JEFFREY T. SMITH and NAGUMO, ***Administrative Patent Judges***.

JEFFREY T. SMITH, ***Administrative Patent Judge***.

DECISION ON APPEAL

Applicants appeal the decision of the Primary Examiner finally rejecting claims 1 to 13.[1] We have jurisdiction under 35 U.S.C. § 134.

[1] Claims 14 to 25 have been withdrawn from consideration.

BACKGROUND

Appellants' invention relates to a method for manufacturing a filter insert. In particular, the invention is a method for manufacturing an accordion filter insert having a peripheral sealing lip that is manufactured with the frame that holds the accordion filter pack. According to Appellants, the sealing lip is elastically deformable which statically holds the filter against housing. (Brief, p. 2). Claim 1 which is representative of the claimed invention reproduced below:

1. A method for manufacturing an accordion filter insert, comprising the steps of:

providing a mold having a cavity that defines a lip;

introducing an accordion filter pack into said mold;

forming a frame about the filter pack by introducing into the mold a liquefied polymer material, so that the polymer flows into spaces in the mold so as to form a frame about the filter and a peripheral elastically deformable sealing lip on the frame when the polymer subsequently solidifies, wherein the frame is manufactured concurrently with the sealing lip.

CITED REFERENCES

As evidence of unpatentability, the Examiner relies on the following references:

Peras	2,889,183	Jun. 2, 1959
Brimberg	3,082,587	Mar. 26, 1963
Wolf	3,869,392	Mar. 4, 1975

THE REJECTIONS

The Examiner entered the following rejections:

The Examiner has rejected claims 1 to 13 as unpatentable under 35 U.S.C. § 103(a) over the combination of Brimberg, Wolf and Pears. (Answer, p. 3).

Appellants have indicated that claim 8 should stand or fall separately from the remaining claims.[2] (Brief, p. 3). Consistent with this indication, Appellants have made no separate arguments with respect to the claims on appeal. Accordingly, claim 8 will stand or fall separately from claims 1 to 7 and 9 to 13 and we will limit our consideration to claims 1 and 8. See 37 CFR § 1.192(c)(7)(1997).

OPINION

We refer to the Brief and to the Examiner's Answer for a complete exposition of the opposing viewpoints expressed by the Appellants and by the Examiner concerning the above noted rejections.

We find the claimed invention is directed to a method for manufacturing an accordion filter insert. The steps of the method include (1) providing a mold that has a

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[2] Appellants stated that claims 1 to 7 and 9 to 15 should stand or fall together. However, the only claims on appeal are claims 1 to 13. Therefore, we will consider claim 8 separately from claims 1 to 7 and 9 to 13.

cavity which defines a lip; (2) introducing the filter pack into the mold; and (3) introducing a liquefied polymer into the mold to form the frame.

Brimberg describes air filters and the method for manufacturing thereof. Brimberg discloses the filters comprise an outer flat flexible section (represented by 16b of the figures). Brimberg discloses the filter can be formed in one piece wherein the different parts of the filter are joined to one another. (Col. 2, ll. 68 to 70). The filter is formed by placing the filter material into the die or mold which has cavities and passages which forms the filter frame. (Col. 2 l. 70 to col. 3, l. 3). The filter is formed by adding a liquid polymer to the mold or die. Brimberg discloses the polymer is brought into intimate physical contact with the filter material. (Col. 3, ll. 21 to 25). When the flowable polymer is introduced into the mold, the polymer impregnates the pores of the filter material and welds and fuses the filter material with the supporting frame casing. (Col. 3, ll. 25 to 30). The method of Brimberg differs from the invention of claim 1 in that the filter media is not described as accordion.

Wolf describes a flat or planar filter insert which comprises an accordion filter. (Col. 1, ll. 1 to 7). The filter is described as "a strip or sheet of the filter media which is pleated or folded in a zig-zag pattern." (Col. 1, ll. 37 to 40). Wolf also discloses the

edges filter media are embedded in the plastic frame and reinforced with a metal strip. (Col. 1, ll. 46 to 48).

Appellants have not argued that the references do not disclose or render obvious the process steps of the claimed invention. Rather, Appellants argue that Brimberg can only be used with planar sheets and the structure of Brimberg is not compatible with an accordion type filter of Wolf. (Brief, p. 4 and 5). "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference . . . Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." ***In re Keller,*** 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). See also ***In re Sneed,*** 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983) ("[I]t is not necessary that the inventions of the references be physically combinable to render obvious the invention under review."); and ***In re Nievelt,*** 482 F.2d 965, 968, 179 USPQ 224, 226 (CCPA 1973) ("Combining the teachings of references does not involve an ability to combine their specific structures."). In the present case, Wolf discloses a planar filter which comprises a sheet of filter media which is pleated and embedded into the filter casing. Brimberg discloses a method of embedding filter media into the surrounding casing. We agree with the Examiner, Answer, p. 5, that one of ordinary skill in the art would have been

motivated to use a pleated filter media in the process of Brimberg because the pleated filter media has greater surface area which will improve air filtration.

Appellants also argue that the use of planar sheets is preferred by Brimberg. (Brief, p. 5). Appellants' argument is not well taken since a reference is available for all that it teaches, not just the preferred embodiments. ***In re Burckel,*** 592 F.2d 1175, 1179, 201 USPQ 67, 70 (CCPA 1979); ***In re Lamberti,*** 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); ***and In re Mills,*** 470 F.2d 649, 651, 176 USPQ 196, 198 (CCPA 1972). Furthermore, Appellants' argument is not directed to the claimed invention. The invention of claim 1 is directed to a method of making a filter, not the resulting filter product. Aside from the difference in structure of the filter media, Appellants have not contested the remaining process limitations of claim 1.

With regard to claim 8, rather than argue the combination of cited references, Appellants argue that "[c]laim 8 recites that the junction between the sealing lip and the frame take the form of a film hinge. Such hinges are generally delicate, and are suitable only for use in static environments." (Brief, p. 8). The issue regarding the invention of claim 8 is whether the mold or die used in the method of claim 1 could have been in the form of a film hinge. The specification does not describe the dimensions of the film hinge. The Examiner cites Peras for describing various configurations of rims, i.e.,

sealing lips. (Answer, p. 5). According to Peras, the rim (component 18) functions to prevent the passage of fluids such as air. (Col. 2, ll. 46 to 48). We note this is the same function as the sealing lip of Brimberg. Peras also discloses the rim can include a groove (component 31) which renders the rim more flexible. (Col. 3, ll. 14 to 16). Thus, one of ordinary skill in the art would have been motivated to perform the method of Brimberg wherein the mold or die included a grove at the base of the sealing lip in order to improve the flexibility at the pivot point of the resulting sealing lip.

For the foregoing reasons and those set forth in the Answer, based on the totality of the record, we determine that the preponderance of evidence weighs in favor of obviousness, giving due weight to Appellants' arguments and evidence. Accordingly, the Examiner's rejection under 35 U.S.C. § 103 is affirmed.

CONCLUSION

The rejection of claims 1 to 13 as unpatentable under 35 U.S.C. § 103(a) over the combination of Brimberg, Wolf and Pears is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

PAUL LIEBERMAN ***Administrative Patent Judge***	)
JEFFREY T. SMITH ***Administrative Patent Judge***	) **BOARD OF PATENT APPEALS AND INTERFERENCES**
MARK NAGUMO ***Administrative Patent Judge***	)

JTS/gjh

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